UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,147	09/18/2000	Nathan F. Raciborski	193696-000500US	6650

7590	03/10/2004

Thomas D Franklin
Townsend and Townsend and Crew LLP
Two Embarcardero Center
8th Floor
San Francisco, CA 94111-3834

EXAMINER
PARTON, KEVIN S

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/664,147	RACIBORSKI ET AL.
	Examiner	Art Unit	
	Kevin Parton	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 January 2003</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-21*</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>*1-21*</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>*17*</u>.

4)☒ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. <u>*18*</u>.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 01/05/2003 have been fully considered but they are not

persuasive. The applicant states that the amendment incorporates language discussed during the

interview of 12/18/2003. It is unclear how this language addresses what was discussed (see

attached interview summary) and the applicant did not provide any arguments to show how this

language differentiates the claims from the prior art. The newly added language does not change

the definition of content object as rejected in the previous action. Please see the grounds of

rejection below.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-4, 6-8, 10, 14, 15, 17, 18, 21, and 22 are rejected under 35 U.S.C. 102(b) as

being anticipated by Kangasharju et al. (1999).

4.   Regarding claim 1, Kangasharju et al. teach a system for reporting status information

from a plurality of content exchanges to a remote system, the system comprising:

> a. A first content exchange comprising a first plurality of content object portions
>
> (abstract, lines 1-3; column 2, paragraph 3). Note that in the reference, cache
>
> servers are content exchanges.

b. A second content exchange comprising a second plurality of content object portions (abstract, lines 1-3; page 2, column 2, paragraph 3). Note that in the reference, cache servers are content exchanges.

c. A server at the remote location, wherein the server comprises a first subset of the first plurality of content object portions and a second subset of the second plurality of content object portions (page 5, column 2, paragraph 4).

d. A first datalink that transports a first catalog of the first subset between the first content exchange and the server (page 5, column 2, paragraph 4; page 6, column 1, paragraph 1).

e. A second datalink that transports a second catalog of the second subset between the second content exchange and the server (page 5, column 2, paragraph 4; page 6, column 1, paragraph 1).

f. Wherein the first plurality of content object portions and the second plurality of content object portions are both at least part of a plurality of content objects (abstract, lines 1-3; page 2, column 2, paragraph 3). Please note that a single object (web site) may have multiple object portions (pages and scripts).

g. Wherein each of the plurality of content objects is chosen from the group consisting of a content file and a content stream (abstract, lines 1-3; page 2, column 2, paragraph 3; page 5, column 2, paragraph 4; page 6, column 1, paragraph 1). Please note that content files are cached in different locations to form content objects.

5.   Regarding claim 2, Kangasharju et al. (1999) teach all the limitations as applied to claim

1. They further teach means wherein the first and second catalogs comprise a plurality of entries

(page 6, column 1, paragraph 2). Note that content updates can be sent in batches.

6.   Regarding claim 3, Kangasharju et al. (1999) teach all the limitations as applied to claim

2. They further teach means wherein at least one of the plurality of entries comprises a content

object filename, a path, and a server name (page 6, column 1, paragraph 2). Note that web page

information is stored, this necessarily includes a server name, path, and filename for each object

cached.

7.   Regarding claim 4, Kangasharju et al. (1999) teach all the limitations as applied to claim

1. They further teach means wherein at least one of the first and second datalinks transport over

the Internet (page 6, column 1, paragraph 2).

8.   Regarding claim 6, Kangasharju et al. (1999) teach all the limitations as applied to claim

1. They further teach means wherein the first datalink transports status information relating to

the first content exchange (abstract; page 2, column 1, paragraph 3).

9.   Regarding claim 7, Kangasharju et al. (1999) teach all the limitations as applied to claim

1. They further teach means wherein at least one of the first and second content exchanges

checks an operational status of the server (page 2, column 1, paragraph 1).

10.   Regarding claim 8, Kangasharju et al. (1999) teach a system for reporting information to

remote locations in a content distribution system with means for:

        a. Determining a first catalog of a first plurality of content object portions

            associated with a first server at a first remote location (page 5, column 2,

            paragraph 4; page 6, column 1, paragraph 2).

   b. Determining a second catalog of a second plurality of content object portions
       associated with a second server at a second remote location (page 5, column 2,
       paragraph 4; page 6, column 1, paragraph 2).

   c. Transporting the first catalog to the first remote location (page 5, column 2,
       paragraph 4; page 6, column 1, paragraph 2).

   d. Transporting the second catalog to the second remote location (page 5,
       column 2, paragraph 4; page 6, column 1, paragraph 2).

   e. Detecting changes to one of the first and second catalogs (page 6, column 1,
       paragraph 2).

   f. Transporting the changes to one of the first and second remote locations (page
       6, column 1, paragraph 2).

   g. Wherein the first plurality of content object portions and the second plurality
       of content object portions are both at least part of a plurality of content objects
       (abstract, lines 1-3; page 2, column 2, paragraph 3). Please note that a single
       object (web site) may have multiple object portions (pages and scripts).

   h. Wherein each of the plurality of content objects is chosen from the group
       consisting of a content file and a content stream (abstract, lines 1-3; page 2,
       column 2, paragraph 3; page 5, column 2, paragraph 4; page 6, column 1,
       paragraph 1). Please note that content files are cached in different locations to
       form content objects.

11.   Regarding claim 10, Kangasharju et al. (1999) teach all the limitations as applied to claim

8. They further teach means for reporting t the first and second servers status information at a

predetermined interval (page 5, column 2, paragraph 4; page 6, column 1, paragraph 2). Note

that the batch sending allows a cache to set an interval after which data will be sent.

12.   Regarding claim 14, Kangasharju et al. (1999) teach all the limitations as applied to claim

8. They further teach means wherein the transporting comprises transporting via the Internet

(page 6, column 1, paragraph 2).

13.   Regarding claim 15, Kangasharju et al. (1999) teach a system for tracking information in

a content distribution system with means for:

   a. Receiving a first content catalog of first content object portions from a first

       remote computer (page 5, column 2, paragraph 4; page 6, column 1, paragraph

       2).

   b. Receiving a second content catalog of second content object portions from a

       second remote computer (page 5, column 2, paragraph 4; page 6, column 1,

       paragraph 2).

   c. Updating a content database with information from the first and second

       content catalogs (page 5, column 2, paragraph 4; page 6, column 1, paragraph

       2).

   d. Receiving a third content catalog from the first remote computer that is

       different from the first content catalog (page 5, column 2, paragraph 4; page 6,

       column 1, paragraph 2).

   e. Receiving a fourth content catalog from the second remote computer that is

       different from the second content catalog (page 5, column 2, paragraph 4;

       page 6, column 1, paragraph 2).

      f. Updating the content database with information from the third and fourth

content catalogs (page 5, column 2, paragraph 4; page 6, column 1, paragraph

2). Note that the nature of updating requires that when a new catalog comes

in, it replaces the information that has changed from the previous catalog.

      g. Wherein the first and second content object portions are both at least part of a

plurality of content objects (abstract, lines 1-3; page 2, column 2, paragraph

3). Please note that a single object (web site) may have multiple object

portions (pages and scripts).

      h. Wherein each of the plurality of content objects is at least one of a content file

and a content stream (abstract, lines 1-3; page 2, column 2, paragraph 3; page

5, column 2, paragraph 4; page 6, column 1, paragraph 1). Please note that

content files are cached in different locations to form content objects.

14.   Regarding claim 17, Kangasharju et al. (1999) teach all the limitations as applied to claim

15. They further teach means for receiving status information related to one of the first and

second remote computers (page 5, column 2, paragraph 4; page 6, column 1, paragraph 2).

15.   Regarding claim 18, Kangasharju et al. (1999) teach all the limitations as applied to claim

15. They further teach means for providing status information to the first and second computers

(page 5, column 2, paragraph 4; page 6, column 1, paragraph 2).

16.   Regarding claim 21, Kangasharju et al. (1999) teach a system for cataloging content

object portions dispersed across a plurality of content exchanges comprising:

    a. A first content exchange comprising a first content object portion, wherein the first content object portion comprises a first subset of a content object (abstract, lines 1-3, page 2, column 2, paragraph 3).

    b. A second content exchange comprising a second content object portion, wherein the second content object portion comprises a second subset of the content object (abstract, lines 1-3, page 2, column 2, paragraph 3).

    c. A remote server, wherein the remote server is communicably coupled to a first datalink and a second datalink, wherein the first datalink transports a first catalog indicating the first content object portion between the first content exchange, and wherein the second datalink transports a second catalog indicating the second content object portion (page 5, column 2, paragraph 4; page 6, column 1, paragraph 1).

    d. Wherein the content object is either a content file or a content stream (abstract, lines 1-3; page 2, column 2, paragraph 3; page 5, column 2, paragraph 4; page 6, column 1, paragraph 1). Please note that content files are cached in different locations to form content objects.

17.   Regarding claim 22, Kangasharju et al. (1999) teach all the limitations as applied to claim 1. They further teach means wherein accessing a content object includes accesing a first content object portion from one of the first subset of the first plurality of content object portions and the second subset of the second plurality of content object portions, and a second content object portion from one of the first plurality of content object portions and the second plurality of content object portions (abstract, lines 1-3; page 2, column 2, paragraph 3; page 5, column 2,

paragraph 4; page 6, column 1, paragraph 1). Note that given the wording of this claim, all

content object portions may reside in the same subset.

Claim Rejections - 35 USC § 103

18.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

19.   Claims 5, 9, 11, 13, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kangasharju et al. (1999) in view of Chase et al. (EP 0 877 326 A2).

20.   Regarding claim 5, although the system disclosed by Kangasharju et al. (1999) (as

applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means

wherein the first subset of the first plurality of content object portions is purged from the first

content exchange when the server becomes unavailable.

        Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al.

(EP 0 877 326 A2).

        In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed

caching of web accessible data wherein the first subset of the first plurality of content object

portions is purged from the first content exchange when the server becomes unavailable (figure

4, element 400).

Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Kangasharju et al. (1999) by employing the purging of cache information when the origin server is no longer available. This benefits the system by causing users to realize the origin server is no longer in operation and that they are no longer able to view the information that was cached. Note that this would be a consequence of sending updates to the origin server of what was being saved.

21.   Regarding claim 9, Kangasharju et al. (1999) teach all the limitations as applied to claim 8. They further teach means for determining the first server is unavailable (page 5, column 2, paragraph 4; page 6, column 1, paragraph 2). Note that in the reference, the client would know the status of the server upon request.

Although the system disclosed by Kangasharju et al. (1999) shows substantial features of the claimed invention, it fails to disclose means for purging the first plurality of content object portions in response to the determining the first server is unavailable.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al. (EP 0 877 326 A2).

In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed caching of web accessible data with means for purging the first plurality of content object portions in response to the determining the first server is unavailable (figure 4, element 400).

Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Kangasharju et al. (1999) by employing the purging of cache information when the origin server is no longer

available. This benefits the system by causing users to realize the origin server is no longer in

operation and that they are no longer able to view the information that was cached. Note that

this would be a consequence of sending updates to the origin server of what was being saved.

22.   Regarding claim 11, although the system disclosed by Kangasharju et al. (1999) (as

applied to claim 8) shows substantial features of the claimed invention, it fails to disclose means

for reporting to the first and second servers an impending unavailability of a content exchange.

        Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al.

(EP 0 877 326 A2).

        In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed

caching of web accessible data with means for reporting to the first and second servers an

impending unavailability of a content exchange (figure 4, element 400).

        Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in

the art would have readily recognized the desirability and advantages of modifying Kangasharju

et al. (1999) by employing the notification of a soon to be unavailable machine. This benefits

the system by allowing the server to avoid holding information on caches that may be corrupted

or emptied when they became unavailable.

23.   Regarding claim 13, although the system disclosed by Kangasharju et al. (1999) (as

applied to claim 8) shows substantial features of the claimed invention, it fails to disclose means

for purging information from a content location database when a content exchange becomes

unavailable.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al.

(EP 0 877 326 A2).

In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed

caching of web accessible data with means for purging information from a content location

database when a content exchange becomes unavailable (figure 4, element 400).

Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in

the art would have readily recognized the desirability and advantages of modifying Kangasharju

et al. (1999) by employing the purging of information relating to an unavailable host or

intermediate cache. This benefits the system by allowing the server to avoid holding information

on caches that may have been corrupted or emptied when they became unavailable.

24.   Regarding claim 16, although the system disclosed by Kangasharju et al. (1999) (as

applied to claim 15) shows substantial features of the claimed invention, it fails to disclose

means for updating the content database when one of the first and second remote computers is

unavailable.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al.

(EP 0 877 326 A2).

In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed

caching of web accessible data with means for updating the content database when one of the

first and second remote computers is unavailable (figure 4, element 400).

Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Kangasharju et al. (1999) by employing the updating of information relating to an unavailable host or intermediate cache. This benefits the system by allowing the server to avoid holding information on caches that may have been corrupted or emptied when they became unavailable.

25.   Regarding claim 19, although the system disclosed by Kangasharju et al. (1999) (as applied to claim 15) shows substantial features of the claimed invention, it fails to disclose means for notifying the first and second computers of impending unavailability.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al. (EP 0 877 326 A2).

In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed caching of web accessible data with means for notifying the first and second computers of impending unavailability (figure 4, element 400).

Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Kangasharju et al. (1999) by informing intermediate caches of an unavailable server. This benefits the system by allowing the computers to no longer hold cached information from an unavailable server that may be in update or not coming back online.

26.   Regarding claim 20, although the system disclosed by Kangasharju et al. (1999) (as applied to claim 15) shows substantial features of the claimed invention, it fails to disclose

means for receiving notification from one of the first and second computers of impending

unavailability.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Chase et al.

(EP 0 877 326 A2).

In an analogous art, Chase et al. (EP 0 877 326 A2) disclose a system for distributed

caching of web accessible data with means for receiving notification from one of the first and

second computers of impending unavailability (figure 4, element 400).

Given the teaching of Chase et al. (EP 0 877 326 A2), a person having ordinary skill in

the art would have readily recognized the desirability and advantages of modifying Kangasharju

et al. (1999) by informing the server of unavailable intermediate caches. This benefits the

system by allowing the server to avoid holding information on caches that may have been

corrupted or emptied when they became unavailable.

27.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kangasharju et

al. (1999) (as applied to claim 8) in view of Tsirigotis et al. (EP 0 847 020 A2).

28.   Regarding claim 12, although the system disclosed by Kangasharju et al. (1999) (as

applied to claim 8) shows substantial features of the claimed invention, it fails to disclose means

for:

     a. Receiving a preload command.

     b. Preloading at least one content object portion from a remote server in response

        to receiving the preload command.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Kangasharju et al. (1999), as evidenced by Tsirigotis et

al. (EP 0 847 020 A2).

In an analogous art, Tsirigotis et al. (EP 0 847 020 A2) discloses a system for distributed

caching with means for:

   a. Receiving a preload command (column 2, lines 30-32).

   b. Preloading at least one content object portion from a remote server in response

       to receiving the preload command (column 2, lines 21-36).

Given the teaching of Tsirigotis et al. (EP 0 847 020 A2), a person having ordinary skill

in the art would have readily recognized the desirability and advantages of modifying

Kangasharju et al. (1999) by employing the preloading of content. This benefits the system by

allowing users to have faster access to information that they are most likely to request.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The

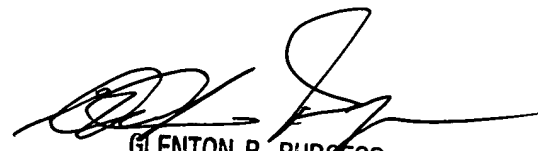examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton
Examiner
Art Unit 2153

ksp

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100